

(FILE 'HOME' ENTERED AT 20:22:19 ON 31 MAR 2003)

FILE 'MEDLINE, CAPLUS, EMBASE, BIOSIS' ENTERED AT 20:22:51 ON 31 MAR 2003

L1	3283 S CCR4 OR TARC OR MDC
L2	22284 S ATOPIC (1W) DERMATITIS
L3	143 S L1 AND L2
L4	55 DUP REM L3 (88 DUPLICATES REMOVED)
L5	1 S L4 AND PY<2000
L6	193 S L2 AND (CLA OR INTEGRIN)
L7	99 DUP REM L6 (94 DUPLICATES REMOVED)
L8	58 S L7 AND PY<2000
L9	11 S L8 AND ANTIBODY
L10	13 S L4 AND ANTIBODY

L9 ANSWER 9 OF 11 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1998377600 EMBASE
TITLE: Regulation of allergic skin inflammation by skin-homing T cells in **atopic dermatitis**.
AUTHOR: Akdis C.A.; Blaser K.
CORPORATE SOURCE: C.A. Akdis, SIAF, Obere Strasse 22, CH-7270 Davos, Switzerland. akdisac@siaf.unizh.ch
SOURCE: Allergy and Clinical Immunology International, (1998) 10/4 (116-121).

Refs: 57

ISSN: 0838-1925 CODEN: ACIIFH

Switzerland

COUNTRY:

DOCUMENT TYPE:

FILE SEGMENT:

Journal; General Review

005 General Pathology and Pathological Anatomy

013 Dermatology and Venereology

026 Immunology, Serology and Transplantation

LANGUAGE: English

SUMMARY LANGUAGE: English

AB In allergic inflammations of the skin, the pivotal role of, CD45RO+ (memory/effector) T cells expressing the cutaneous lymphocyte associated antigen (**CLA**) has been demonstrated. In both **atopic dermatitis** (AD) and contact dermatitis (CD), T cells specific to skin-related allergens are confined to the **CLA**+ T-cell population, whereas T-cell responses to systemically acting antigen, such as tetanus toxoid, are distributed among both subsets. Binding of **CLA** to its ligand, E-selectin, initiates skin-selective transendothelial migration, which is under the control of CXC chemokines and the interleukin 8 (IL-8) type B receptor. The **CLA**+ CD45RO+ T cells make up about 5-20% of the circulating T cells, and peripheral

blood

CLA+ CD45RO+ T cells represent an in vivo activated memory/effector T-cell subset. They have increased surface expression of activation markers, and show spontaneous proliferation. These cells contain preformed cytokines in their cytoplasm, as demonstrated by intracellular cytokine staining immediately after purification. In AD

they

contain and spontaneously release a pattern of Th2 cytokines with little IL-4 and high amounts of IL-5 and IL-13. Moreover, **CLA**+ memory/effector T cells induce IgE production in B cells and enhance eosinophil survival by inhibiting eosinophil apoptosis in AD. In comparison, the **CLA**- population is a resting memory T-cell fraction, induces IgG4 in B cells, and does not show any effect on eosinophil survival and apoptosis. These results indicate that in vivo activated memory/effector T cells with skin-homing properties play a specific and decisive role in the pathogenesis and exacerbation of allergic skin diseases.

L9 ANSWER 5 OF 11 MEDLINE
 ACCESSION NUMBER: 95337787 MEDLINE
 DOCUMENT NUMBER: 95337787 PubMed ID: 7613172
 TITLE: Allergen specificity and endothelial transmigration of T cells in allergic contact dermatitis and **atopic dermatitis** are associated with the cutaneous lymphocyte antigen.
 AUTHOR: Santamaria L F; Perez Soler M T; Hauser C; Blaser K
 CORPORATE SOURCE: Swiss Institute of Allergy and Asthma Research (SIAF), Davos Platz.
 SOURCE: INTERNATIONAL ARCHIVES OF ALLERGY AND IMMUNOLOGY, (1995 May-Jun) 107 (1-3) 359-62.
 Journal code: 9211652. ISSN: 1018-2438.
 PUB. COUNTRY: Switzerland
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 199508
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AB Recent investigations have indicated a role for antigen-specific T lymphocytes in the local skin immunity. The cutaneous lymphocyte antigen

(
CLA) is supposed to represent a skin-homing receptor for T cells. Inhibition experiments with specific monoclonal **antibody** demonstrate that **CLA** participates in selective transendothelial migration of memory/effector T cells in vitro by interaction with E-selectin on endothelial cell layers after activation with proinflammatory cytokines. In addition, the receptor-ligand pairs VLA-4/VCAM-1 and LFA-1/ICAM-1 are involved in this process. Moreover,

only **CLA+**, CD45RO+ (memory/effector) T cells freshly isolated from peripheral blood of patients with allergic contact dermatitis or **atopic dermatitis** specifically proliferate in response to the respective allergen. **CLA-**, CD45RO- T cells from these patients do not respond to the allergens. In contrast, memory T cells

from asthmatic individuals and patients with both asthma and **atopic dermatitis** express the allergen specificity in both T cell subsets. Tetanus toxoid, a systemically acting antigen, also induces a proliferative response in both **CLA+** and **CLA-** memory/effector T cell subsets. These results strongly support the selective role of **CLA** in homing T cells to the cutaneous tissues and therefore playing a role in the local immunity and inflammatory reactions of the skin.

L10 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:907525 CAPLUS
DOCUMENT NUMBER: 134:16277
TITLE: Skin diseases and chemokines
AUTHOR(S): Yoshie, Osamu
CORPORATE SOURCE: Sch. Med., Kinki Univ., Japan
SOURCE: Nippon Hifuka Gakkai Zasshi (2000), 110(12,
Rinjizokango), 1807-1808
CODEN: NHKZAD; ISSN: 0021-499X
PUBLISHER: Nippon Hifuka Gakkai
DOCUMENT TYPE: Journal; General Review
LANGUAGE: Japanese
AB A review, with 10 refs., on isolation of SCM-1 (lymphotactin),
TARC, LARC (MIP-3.alpha./Exodus), PARC (DC-CK/AMAC-1), ELC
(MIP-3.beta.), and SLC (6Ckine), anal. of **CCR4**-expressing cells,
and important role of **TARC/MDC** and **CCR4** in
pathogenesis of skin inflammation esp. **atopic dermatitis**
. **CCR4** is a good marker of Th2 cells in blood and
administration of neutralizing **antibody** to **TARC**
suppresses infiltration of eosinophil in tissues and airway
hypersensitivity.

L10 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:28942 CAPLUS

DOCUMENT NUMBER: 137:18832

TITLE: **TARC**: novel mediator for allergic inflammation

AUTHOR(S): Sandoval-Lopez, G.; Teran, L. M.

CORPORATE SOURCE: Inst. Nac. Enfermedades Respiratorias Calzada, Mexico City, 14080, Mex.

SOURCE: Clinical and Experimental Allergy (2001), 31(12), 1809-1812

CODEN: CLEAEN; ISSN: 0954-7894

PUBLISHER: Blackwell Science Ltd.

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review on the potential role of the CC chemokine, called **TARC**, in allergic inflammation. **TARC** is located on chromosome region 16q13, and it is 2716 base pairs in length, coding a highly basic preprotein of 94 amino acid residues with a cleavage site between Ala 23 and Ala 24. The use of a monoclonal **antibody** to neutralize **TARC** in a mouse model of asthma has shown an important contribution for this cytokine in inducing the infiltration of both CD4+ lymphocytes and eosinophils in response to allergen challenge. This observation is further supported by the finding of increased **TARC** in the airways of asthmatic patients. **TARC** has also been implicated in other allergic diseases including allergic rhinitis, **atopic dermatitis**, and allergic contact dermatitis. The use of small **CCR4** antagonists with clin. efficacy may have a substantial impact in treating allergic disease

L10 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:428737 CAPLUS

DOCUMENT NUMBER: 137:1473

TITLE: Chemokine and chemokine receptor gene expression for skin disorder diagnosis and therapy

INVENTOR(S): Homey, Bernhard; Zepeda, Monica L.; Zlotnik, Albert

PATENT ASSIGNEE(S): Schering Corporation, USA

SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002043758	A2	20020606	WO 2001-US44338	20011127
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UZ, VN, YU, ZA, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SI, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2002025756	A5	20020611	AU 2002-25756	20011127
US 2002111290	A1	20020815	US 2001-995534	20011127
PRIORITY APPLN. INFO.:			US 2000-250782P P	20001201
			WO 2001-US44338 W	20011127

AB The present invention is based, in part, upon the recognition of the correlation of chemokine and chemokine receptor agonists and antagonists in skin inflammation disorders, and in wound healing. The present invention provides methods of diagnosing or evaluating a skin injury or condition affecting the skin, the method comprising evaluating expression of: a chemokine selected from MCP-2 (CCL8), DC-CK1 (CCL18), **TARC** (CCL17), RANTES (CCL5), MIP3b (CCL19), I-309 (CCL1), MIG (CXCL9), IP-10 (CXCL10), ITAC (CXCL11), BCA-1 (CXCL13), lymphotactin (XCL1), **MDC** (CCL22), IL-8 (CXCL8), MCP-3 (CCL7), MCP-1 (CCL2), or SDF-1; or a chemokine receptor selected from CCR5, CCR7, CXCR3, CXCR5, XCR1, CCR2, **CCR4**, CCR8, or CXCR4. Typically, the condition is selected from lupus erythematosus, **atopic dermatitis**, cutaneous wound, skin healing, or an inflammatory condition; or the evaluating is: measuring a plurality of the expression levels; measuring mRNA levels; or measuring protein levels. The invention further provides methods of treating a condition affecting the skin, the method comprising administering an antagonist of a chemokine. Specific primers and probes for the human and mouse chemokines and chemokine receptors were designed and validated.